



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,625	08/14/2006	Tadashi Marumoto	2006_1039A	9667
513 7590 06/24/2010 WENDEROTH, LIND & PONACK, L.L.P. 1030 15th Street, N.W., Suite 400 East Washington, DC 20005-1503				
EXAMINER NAKARANI, DHIRAJLAL S				
ART UNIT 1787		PAPER NUMBER		
NOTIFICATION DATE 06/24/2010		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ddalecki@wenderoth.com
coa@wenderoth.com

Office Action Summary

Application No.

10/584,625

Applicant(s)

MARUMOTO, TADASHI

Examiner

D. S. Nakarani

Art Unit

1787

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS-08)
Paper No(s)/Mail Date 05/25/2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on May 25, 2010 has been entered.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 3-5, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al (U. S. Patent Application Publication US 2003/0054160 A1) in view of Fukatani et al (U. S. Patent Application Publication US 2004/0234778 A1) and Coaker et al (U. S. Patent 3,841,890).

Fisher et al disclose a glass laminate comprising: glass plate/interlayer/glass plate (Paragraph [0041]). The interlayer comprises: polyvinyl butyral, plasticizer, coloring agent, LaB₆, ITO and/or ATO (Paragraphs [0022] to [0040]). Fisher et al also disclose dispersing LaB₆, ITO and/or ATO in plasticizer Examples 2, 3 and 6). Fisher et al disclose usable plasticizer mixtures of phosphates and adipates such as disclosed in U. S. Patent 3,841,890 (Paragraph [0040], lines 12-13). Fisher et al fail to disclose use of claimed phosphoric acid ester as dispersion stabilizer.

Fukatani et al disclose a dispersion of ITO and/or ATO in plasticizer using phosphate ester compound as dispersion stabilizer from 0.0005 to 5.0 wt. parts per 100 wt. polyvinyl

Art Unit: 1787

acetal, such as polyvinyl butyral for reducing haze due to agglomerates of ITO and/or ATO (Paragraphs [0096], [0097] and [0190]). Fukatani et al disclose claimed phosphoric acid ester compound (Paragraph [0066]).

Coaker et al disclose that a mixture of a phosphate ester plasticizer and a diester of an aliphatic dicarboxylic acid wherein the diester contains from 14 to 28 carbon atoms for polyvinyl butyral interlayer. Coaker et al's blend allows the use of many phosphate and diester plasticizers which are unsuitable when used alone (Abstract). Coaker et al disclose ratio of phosphate ester plasticizer to diester plasticizer from 5:95 to 95:5 (Col. 4, lines 4-6). Coaker et al disclose ratio of phosphate ester plasticizer to diester plasticizer: 5/95 (Example 5) and 10/90 (Example 6). Coaker et al's disclosed phosphate ester plasticizer includes phosphate ester plasticizer disclosed by Fukatani et al (Paragraph [0066]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of this invention made to utilize disclosure of Fukatani et al and Coaker et al in the invention of Fisher et al to disperse LaB_6 , ITO and/or ATO in a plasticizer containing phosphoric acid ester compound as dispersion stabilizer to prevent haze and for compatibility.

No claims are allowed.

4. Receipt of Information Disclosure Statement filed May 25, 2010 is acknowledged and recited document has been made of record.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. S. Nakarani whose telephone number is (571) 272-1512. The examiner can normally be reached on Monday-Friday.

Art Unit: 1787

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie E. Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/D. S. Nakarani/
Primary Examiner, Art Unit 1787**

DSN
June 20, 2010.